

WHAT IS CLAIMED IS:

1. A multiple component spunbond nonwoven web comprising polymeric sheath-core substantially continuous spunbond fibers wherein the sheath component comprises a blend comprising polyethylene and
5 between about 5 and 30 weight percent of an acid copolymer selected from the group consisting of copolymers of ethylene with methacrylic acid, acrylic acid, or a combination thereof, metal salts of said copolymers, and blends thereof, the core component comprises a polymer selected from the group consisting of polyesters and polyamides, and the weight ratio of
10 sheath component to core component is between about 10:90 and 90:10.
2. The multiple component spunbond web of claim 1, wherein the spunbond web is thermally bonded and has a ratio of grab tensile strength to basis weight of at least 0.66 N per g/m² in both the machine direction
15 and the cross-direction.
3. The multiple component spunbond web of claim 2, wherein the spunbond web is thermally bonded with a pattern of intermittent thermal
20 bonds.
4. The multiple component spunbond nonwoven web of claim 2, wherein the core component is substantially free of acid copolymer.
5. The multiple component spunbond web of claim 4, wherein the
25 weight ratio of sheath component to core component is between about 40:60 to 60:40.
6. The multiple component spunbond web of claim 4, wherein the polyethylene in the sheath component is linear low density polyethylene,
30 the acid copolymer is a copolymer of ethylene and an acid selected from the group consisting of acrylic acid, methacrylic acid, and blends thereof, the acid copolymer has an acid content between about 4 and 20 weight percent, and the core component comprises poly(ethylene terephthalate).
7. The multiple component spunbond web of claim 4, wherein the polyethylene in the sheath component is linear low density polyethylene,
35 the acid copolymer is a metal salt of a copolymer of ethylene and an acid selected from the group consisting of acrylic acid, methacrylic acid, and

blends thereof, the acid copolymer has an acid content between about 5 to 25 weight percent, and the core component comprises poly(ethylene terephthalate).

- 5 8. A multi-layer composite sheet comprising:
 a first multiple component spunbond nonwoven web according
to claim 1 having a first side and a second side; and
 a sheet-like layer thermally bonded to the first side of the
multiple component spunbond nonwoven web, the sheet-like layer
10 selected from the group consisting of nonwoven webs, woven fabrics, knit
fabrics, and films.
9. The multi-layer composite sheet of claim 8 wherein the sheet-
like layer is a nonwoven web selected from the group consisting of
15 meltblown webs and spunlaced webs.
10. The multi-layer composite sheet of claim 9 wherein the sheet-
like layer is a spunlaced web comprising polyester fibers.
- 20 11. The multi-layer composite sheet of claim 9 wherein the sheet-
like layer is a meltblown web comprising meltblown fibers having an outer
peripheral surface comprising polyester.
12. The multi-layer composite sheet of claim 8, further comprising
25 a second multiple component spunbond nonwoven web according to claim
1, wherein the sheet-like layer is sandwiched between and thermally
bonded to the first and second spunbond layers.
13. The multi-layer composite sheet of claim 12, wherein the core
30 components of both the first and second multiple component spunbond
webs are substantially free of acid copolymer.
14. The multi-layer composite sheet of claim 13, wherein the sheet-
like layer is a meltblown web comprising meltblown fibers having an outer
35 peripheral surface comprising polyester.
15. The multi-layer composite sheet of claim 14, wherein the
meltblown fibers are bicomponent fibers.

16. The multi-layer composite sheet of claim 15 wherein the meltblown fibers further comprise linear low density polyethylene and the linear low density polyethylene and polyester components in the meltblown fibers are arranged in a side-by-side configuration.

17. The multi-layer composite sheet of claim 14 wherein the polyethylene in the sheath component of the spunbond fibers of the first and second multiple component spunbond webs is linear low density polyethylene, the acid copolymer is a copolymer of ethylene and an acid comonomer selected from the group consisting of acrylic acid, methacrylic acid, and blends thereof, the acid copolymer has an acid content between about 4 and 20 weight percent, and the core component of the spunbond fibers of the first and second multiple component webs comprises poly(ethylene terephthalate).

18. The multi-layer composite sheet of claim 10 wherein the polyethylene in the sheath component of the spunbond fibers of the first and second multiple component spunbond webs is linear low density polyethylene, the acid copolymer is a copolymer of ethylene and an acid comonomer selected from the group consisting of acrylic acid, methacrylic acid, and blends thereof, the acid copolymer has an acid content between about 4 and 20 weight percent, and the core component of the spunbond fibers of the first and second multiple component webs comprises poly(ethylene terephthalate).

19. The multi-layer composite sheet according to claim 8 further comprising a second sheet-like layer thermally bonded to the second side of the multiple component spunbond nonwoven web so that the multiple component spunbond web is sandwiched between the sheet-like layers, wherein the second sheet-like layer is selected from the group consisting of nonwoven webs, woven fabrics, knit fabrics, and films.

20. The multi-layer composite sheet according to claim 19 wherein the first and second sheet-like layers are selected from the group consisting of spunlaced webs, spunbond webs, knit fabrics, and woven fabrics.

21. The multi-layer composite sheet according to claim 20 wherein the sheet-like layers are thermally point bonded to the multiple component spunbond web.

- 5 22. The multi-layer composite sheet according to claim 21 wherein the first and second sheet-like layers comprise spunlaced webs.